


[Subscribe \(Full Service\)](#) [Register \(Limited Service, Free\)](#) [Login](#)

## Advanced Search

### THE ACM DIGITAL LIBRARY

No results were found.

Please revise or start a new search instead.

Enter words, phrases or names below to revise your search.  
Surround phrases or full names with double quotation marks.



#### Words or Phrases

Find [any field]  with

all of  
this  
text  
(and)  
 any  
of  
this  
text  
(or)  
 none  
of  
this  
text  
(not)

#### Names

Find  
[any field]   
with names

using  all  any  none of the  
names

#### Keywords

Find author's  
keywords

using  all  any  none of the  
keywords

#### Affiliations

Find  
company or  
school

using  all  any  
 none of the affiliations

#### Publication

Find  
publication

using  all  any  none of the  
names

#### Find publisher

using  any  none of the names

Published since [year]  Published before 2004

In publication types  Journal  Proceeding  Transaction  Magazine  Newsletter

#### Conference

Find sponsor  
names

Find location

using  any  none of the locations

using  all  any  none of the  
names

Find year  
(yyyy)

using  any  none of the years

#### Identification codes

Find  
ISBN/ISSN

Find DOI

#### Computing Classification System (CCS)

Find node

#### Required components

Find  
subject/noun

Results must have  Full Text  Abstract  Re

Look at primary category only



The ACM Portal is published by the Association for Computing Machinery. Copyright © 2008 ACM, Inc.

[Terms of Usage](#) [Privacy Policy](#) [Code of Ethics](#) [Contact Us](#)